WHAT IS CLAIMED IS:

1. A method for making a body cavity occlusion device, the method comprising:

providing an elongated, flexible, filamentous carrier; and

coaxially encapsulating at least a portion of the length of the carrier in an expansile, hydrophilic polymer.

2. The method of claim 1, wherein encapsulating the carrier comprises:

providing an elongated member of the polymer in a softened state; and

skewering the member coaxially with the carrier.

3. The method of claim 2, wherein providing the elongated member comprises inserting the member into a tubular holder such that the member is radially confined and axially restrained therein.

4. The method of claim 1, wherein encapsulating the carrier comprises:

providing a mold having an elongated cavity therein;

disposing the carrier coaxially within the cavity of the mold; and

transferring the polymer into the cavity such that the polymer is thereby molded into a member coaxially encapsulating at least a portion of the length of the carrier.

5. The method of claim 1, wherein the carrier includes an axial lumen, and wherein encapsulating the carrier comprises substantially filling the lumen of the encapsulated portion of the carrier with the polymer.

6. The method of claim 1, wherein the carrier includes an axial lumen, and further comprising forming an axial reservoir in the lumen.

7. The method of claim 6, wherein forming the axial reservoir comprises:

inserting an elongated mandrel into the lumen of the carrier before the encapsulation thereof; and

removing the mandrel from the lumen of the carrier after the encapsulation thereof.

8. A method for delivering a therapeutic agent to a patient, the method comprising:
making an embolization device in accordance with the method of claim 6;
disposing a therapeutic agent in the axial reservoir of the device; and
embolizing a body cavity of the patient with the device.

9. The method of claim 1, further comprising dehydrating the polymer to shrink it.

10. The method of claim 9, wherein dehydrating the polymer comprises immersing the device in a hygroscopic medium.

11. The method of claim 9, wherein dehydrating the polymer comprises heating the device.

12. The method of claim 1, wherein the polymer has a rate of hydration in an aqueous medium that is a function of a physical parameter of the medium, and further comprising setting the rate of hydration of the polymer in response to the parameter.

13. The method of claim 12, wherein adjusting the rate of hydration comprises treating the polymer with an acid.

14. The method of claim 12, further comprising immersing the device for a period of time in an aqueous medium having the physical parameter, wherein the period of time and the physical parameter of the medium are selected so as to soften the polymer and render it lubricious without substantially expanding it.

15. A device for occluding a body cavity, the device comprising:
an elongated, flexible, filamentous carrier; and
a member of an expansile, hydrophilic polymer coaxially encapsulating at least a portion of the length of the carrier.

16. The device of claim 15, wherein the carrier includes an axial lumen, and wherein the polymer of the member substantially fills the lumen of the encapsulated portion of the carrier.

17. The device of claim 15, wherein the carrier includes an axial lumen having an axial reservoir therein.

18. The device of claim 15, wherein the carrier comprises a filamentous element selected from the group consisting of a flexible wire, helical coil, and tube.

19. The device of claim 15, wherein the coaxial member is cylindrical.

20. The device of claim 15, wherein the coaxial member comprises hydrogel.

21. The device of claim 15, wherein the coaxial member is at least one of biodegradable and bioresorbable.

22. The device of claim 15, wherein the coaxial member has a substantially greater lubricity when hydrated than when dry.

23. A device for occluding a cavity, the device comprising:

an elongated, filamentous carrier formed of a biocompatible material having an elastic memory and an external surface; and

a coaxial member of an expansile hydrogel formed over the carrier such that the member covers a substantial portion of the external surface of the carrier;

wherein the device has at least one of a greater flexibility and a greater lubricity when the hydrogel is hydrated than when the hydrogel is dehydrated.

24. The device of claim 23, wherein an unsupported end of a portion of the device deflects downward under the weight of the portion and relative to an opposite, supported end of the portion about 0.75 in. (19.1 mm) when:

the hydrogel is in a dry state and a horizontal distance between the opposite ends of the portion is more than about 2.25 in. (57.2 mm);

the hydrogel is in a moderately hydrated state and the horizontal length is between about 1.5 in. (38.2 mm) and 2.25 in. (57.2 mm); and,

the hydrogel is in a fully hydrated stated and the horizontal length is less than about 1.5 in (38.2 mm).

25. A device for occluding a body cavity, the device comprising:

an elongated, filamentous carrier with an external surface; and

a coaxial member of a hydrophilic polymer covering a substantial portion of the external surface of the carrier;

wherein a physical property of the coaxial member in an aqueous environment is a function of time in the environment and a physical parameter of the environment.

26. The device of claim 25, wherein the physical property is at least one of the flexibility and the lubricity of the member, and wherein the physical parameter of the environment is at least one of the temperature and the pH of the environment.